

# PATENT ABSTRACTS OF JAPAN

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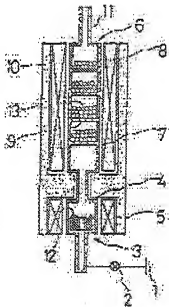
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## 54) PRODUCTION OF SILICON SULFIDE

### 57)Abstract:

**PURPOSE:** To mass-produce silicon sulfide at low cost by feeding vaporized sulfur to a reactor together with a carrier gas and allowing the vaporized sulfur to contact and react with heated silicon powder and forming the silicon sulfide.

**CONSTITUTION:** The silicon powder 13 is contained on multi-stage diaphragms 9 having small holes which is arranged in a reaction container 7 of a silicon sulfide synthesizing device 6 and is heated to the reaction temp. of 800W1,200° C by a heater 8. The powdery sulfur 12 is contained in a vaporization container 4 of a sulfur vaporizing device 3, and the sulfur vapor is generated by heating with a heater 5, then the formed vaporized sulfur is introduced into the reaction container 7 together with the carrier gas fed from the carrier gas device 1. Then the silicon sulfide is formed by subjecting the vaporized sulfur to react with the silicon on the surface of the heated silicon powder 13. At the same time, the formed silicon sulfide is sublimated, vaporized and taken from a synthesized gas outlet 11.



## LEGAL STATUS

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